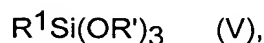


4. (Amended) Silicic acid polycondensate according to claim 1, wherein up to 90 mole percent of said compound of the general formula II are replaced by one or more compounds of the general formula V, wherein the molar ratio of said replaced compound II in relation to compound V is 1 : 1,



and wherein the radicals are identical or different and have the following meaning:

$R' =$  methyl or ethyl,

$R^1 =$   $CF_3-(CF_2)_n-C_2H_4-$ , with  $n = 0$  to  $7$ ,

$R^2HN-(CH_2)_3-$ , with  $R^2 = H, CH_3, C_2H_5$  or  $C_2H_4-NHR^2$ ,

$H_2N-C_2H_4-NH-CH_2-C_6H_4-C_2H_4-$ ,

substituted and unsubstituted alkyl having 1 to 8 carbon atoms,

substituted and unsubstituted phenyl, tolyl and naphthyl.

5. (Amended) Silicic acid polycondensate according to claim 1, wherein up to 80 mole percent of said compound II are replaced by more than one compound selected from the group consisting of more than one compound of general formula III, more than one compound of general formula IV, more than one compound of general formula V, compounds of general formula III and IV, compounds of general formula III and V, compounds of general formula IV and V and compounds of general formula III and IV and V.

6. (Amended) Silicic acid polycondensate according to claim 1, obtainable by using a condensation catalyst which is triethylamine,  $NH_4F$  or an alkaline earth hydroxide.

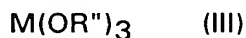
7. (Amended) Silicic acid polycondensate according to claim 1, obtainable by compounds selected from those of the general formula III, IV (with  $M'$  being Ti or Zr) or V (with  $R^1$  being  $R^2HN-(CH_2)_3-$  or  $H_2N-C_2H_4-NH-CH_2-C_6H_4-C_2H_4-$ ) acting as condensation catalysts.

wherein the molar ratio of the compounds I and II in relation to the monomers is 1 : 1,

wherein up to 90 mole percent of said compound II can be replaced by one or more co-condensable compounds of boron, aluminum, silicon, germanium, titanium and zirconium, and wherein the radicals are identical or different and have the following meaning:

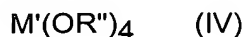
Ar = a radical having 6 to 20 carbon atoms and at least one aromatic group,  
R = an organic radical having 2 to 15 carbon atoms and at least one epoxy group and/or at least one C = C double bond,  
R' = methyl or ethyl.

2. (Amended) Silicic acid polycondensate according to claim 1, wherein up to 90 mole percent of said compound of the general formula II are replaced by one or more compounds of the general formula III,



in which M means one of boron and aluminum, R'' represents an alkyl radical with 1 to 4 carbon atoms, and wherein the molar ratio of said replaced compound II in relation to said compound III is 3 : 2.

3. (Amended) Silicic acid polycondensate according to claim 1, wherein up to 90 mole percent of said compound of the general formula II are replaced by one or more compounds of the general formula IV



in which M' means silicon, germanium, titanium or zirconium, R'' represents an alkyl radical having 1 to 4 carbon atoms, and wherein the molar ratio of said replaced compound II in relation to said compound IV is 2 : 1.

8. (Amended) Silicic acid polycondensate according to claim 1, wherein said radical Ar of the general formula I means a substituted aromatic radical.

9. (Amended) Silicic acid polycondensate according to claim 8, wherein said radical Ar of the general formula I means phenyl, naphthyl or styryl.

10. (Amended) Silicic acid polycondensate according to claim 1, wherein said radical R of the general formula II contains functional groups.

11. (Amended) Silicic acid polycondensate according to claim 1, wherein said radical R<sup>1</sup> of the general formula V contains SH groups and/or NR<sup>\*</sup><sub>2</sub> groups, with R<sup>\*</sup> being hydrogen or alkyl.

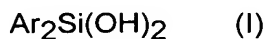
12. (Amended) Silicic acid polycondensate according to claim 1, wherein said radical R of the general formula II contains at least one acryl and/or methacryl group.

13. (Amended) Silicic acid polycondensate according to claim 1, obtainable by adding polysiloxanes to the reaction medium, said polysiloxanes having been obtained by reacting organically modified silanediols of the general formula I with organically modified silanes of the general formula II.

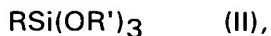
14. (Amended) A stable in storage, UV curable, NIR permeable material that is photostructurable in layers of a thickness of 1 to 150 μm, wherein said material comprises a silicic acid polycondensate according to claim 1.

15. (Amended) A material according to claim 14, wherein said material is a negative resist.

17. (New) Silicic acid polycondensate, obtainable by condensation of one or more organically modified silanediols of the general formula I and/or precondensates derived therefrom



with one or more organically modified silanes of the general formula II



wherein condensation occurs without the addition of water,

wherein the molar ratio of the compounds I and II in relation to the monomers is 1 : 1, wherein up to 90 mole percent of said compound II can be replaced by one or more co-condensable compounds of boron, aluminum, silicon, germanium, titanium and zirconium, and wherein the radicals are identical or different and have the following meaning:

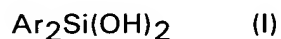
Ar = a radical having 6 to 20 carbon atoms and at least one aromatic group,

R = an organic radical having 2 to 15 carbon atoms and at least one epoxy group and/or at least one C = C double bond,

R' = methyl or ethyl.

18. (New) A material that is photostructurable in layers of a thickness of 1 to 150  $\mu\text{m}$ , wherein said material comprises an organically modified silicic acid polycondensate according to claim 17.

19. (New) Method for producing the silicic acid polycondensates according to claim 17 by condensing one or more organically modified silanediols of the general formula I and/or precondensates derived therefrom



with one or more organically modified silanes of the general formula II

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